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(54) **Scanning wheel for ion implantation process chamber**

(57) A scan wheel for an ion implanter. The scan wheel having a plurality of wafer support elements each having an elastomer layer 7 on which a wafer is supported. Each wafer support element 3 has a plurality of spring loaded plungers 10 of a material having a lower coefficient of friction than that of the elastomer layer 7

so as to support a wafer such that it can be slid across the wafer support element 3 without sticking to the elastomer layer 7. A position detector 33 can be provided on a gripper which mounts each wafer on a wafer support element to detect that the wafer has been correctly positioned.

